

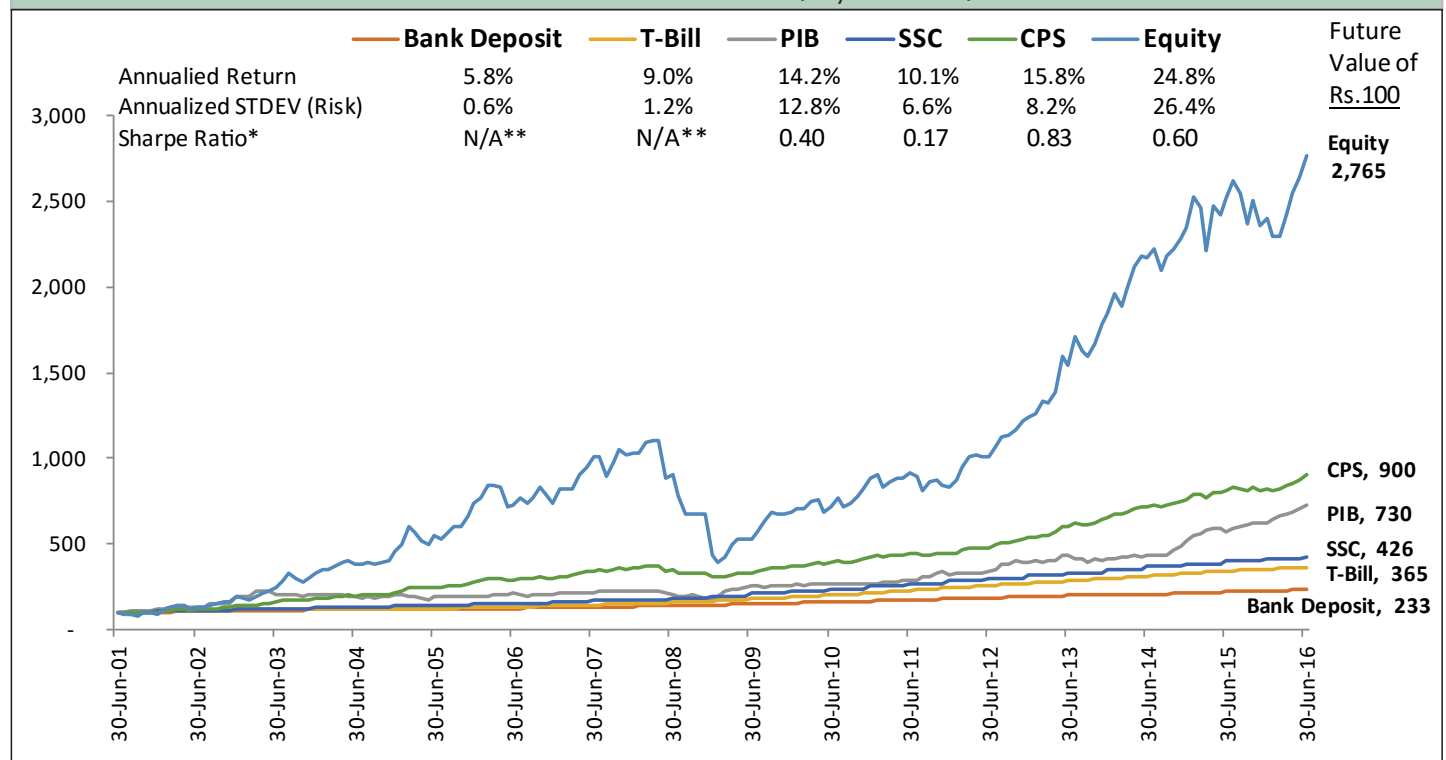
## Performance of Key Asset Classes A 15 Year Snapshot

With the objective to provide guidance for prudent investment decision, we have analyzed the historical performance of key domestic asset classes for a 15 year period (June 2001 to June 2016) to see how their risk/return compare over time. We have included six key investment categories for which long-term data is available, comprising of five major asset classes i.e. Treasury Bills, Bank Deposits, National Savings Schemes (NSS), Pakistan Investment Bonds (PIBs) and Equities, and one synthetic asset class i.e. Capital Protected Strategy (CPS) in our analysis. During this 15-year period, headline inflation (CPI) has averaged 8.4% per annum and Pak Rupee has depreciated by 4.4% per year, on average, against the US Dollar.

T-Bills are zero coupon short term sovereign debt instruments, issued in 3, 6 and 12 month tenors. National Savings Schemes (NSS), representing unfunded government debt, are non-tradable instruments of various maturities. For our study, we have used Special Savings Certificates as a proxy for NSS. For bank deposits, we have used monthly weighted average deposit rates published by the SBP. We have used 10-year PIB for return on long-term Sovereign Bonds. Under the Capital Protected Strategy (CPS), the portfolio is dynamically managed between a low risk and a high risk asset with the objective of protecting the initial investment amount, while also capturing upside growth of the stock market.

The historical analysis, as given in the Graph below, shows that equities offered the highest return among all asset classes. A PKR 100 investment in equities in June 2001 would be worth PKR 2,765 by June 2016 in nominal terms. During the same period, a PKR 100 investment in bank deposits would increase to just PKR 233, not even compensating for inflation. However, as expected, equities exhibited the highest volatility (risk) and bank deposits and T-bills the lowest, supporting the time-tested investment notion that there is a positive correlation between risk and return.

Performance of asset classes from July 2001 to June 2016



\*Sharpe Ratio = Excess return per unit of risk = (Expected return – Risk free rate)/(Standard deviation), we have used 6M T-bill as a proxy for risk free rate

\*\*Due to negative excess return, standard sharpe ratio is meaningless

Source: SBP Statistical Bulletin, PSX, NSS website, NAFA Research

During the 15-year period, Capital Protected Strategy offered the best risk-adjusted return as measured by Sharpe Ratio, delivering an attractive nominal return of about 15.8% per annum with a relatively low risk level (standard deviation of 8.2%). However, this strategy performs well in a trending market and deliver lagged performance in non-trending and highly volatile markets due to large transaction costs associated with frequent entries/exits. As an alternative, one can consider a strategic asset allocation strategy that provides the flexibility to increase equity exposure when stock market is expected to perform well, and decrease equity exposure when stock market is expected to decline.